

**IN THE SPECIFICATION**

Please replace the third paragraph on page 28 of the specification (see lines 13-28 on page 28) with the amended paragraph set forth below. (Appendix A, which is enclosed herewith, shows how the third paragraph on page 28 was amended to produce the amended paragraph set forth below. In Appendix A, the portions being added are underlined; and the portions being deleted are enclosed in brackets.)

a1 The E4 ORF6 gene DNA was amplified by PCR using the oligonucleotides 5'-TTATACGCGTGCCACCATGACTACGTCCG-3' (SEQ ID NO: 1) and 5'-TTATGCTAGCGGAAGGAGAAGTCCACG-3' (SEQ ID NO: 2) and pFG140 containing Ad5 viral genomic DNA as substrate. Amplified DNA was inserted into the pBI plasmid (Clontech) (Baron, U. et al. (1995) Nucleic Acids Res, 23 (17) 3605-3606) containing a bidirectional promoter consisting of a single tetracycline-responsive element (TRE) flanked by two cytomegalovirus (CMV) minimal promoters, between the restriction sites MluI and NheI, generating the pBI.E4 plasmid. pBI.E4 was modified by inserting between the restriction sites NotI and SalI, the DNA coding for the adenovirus E1 region obtained by PCR, using the oligonucleotides 5'-ATGCGCGGCCGCTGAGTTCCTCAAGAGG-3' (SEQ ID NO: 3) and 5'-ATGCGTCGACCAGTACCTCAATCTGTATCTTC-3' (SEQ ID NO: 4), finally obtaining the pBI.E1/E4 construct (Fig.1).

Please replace the second paragraph on page 30 of the specification (see lines 16-37 on page 30) with the amended paragraph set forth below. (Appendix A, which is enclosed herewith, shows how the second paragraph on page 30 was amended to produce the amended paragraph set forth below. In Appendix A, the portions being added are underlined; and the portions being deleted are enclosed in brackets.)

A DNA fragment containing the whole Adenovirus 5 E4 region was obtained cleaving the plasmid pBHG10 (Bett et al. Proc. Natl Acad Sci. 91:8802-8806; 1994) with SpeI and ClaI restriction enzymes. The isolated fragment was ligated in the pBluescript vector (Stratagene), between the restriction sites SpeI and ClaI yielding the plasmid pBSE4. Then pBSE4 was modified by inserting an eptamer of DNA binding sites for the Tet repressor into the unique Pac I restriction site, generating pBSE4-ept. The Tet eptamer DNA was amplified by PCR using the oligonucleotides 5'-CTGATTAATTAAATAGGCGTATCACGAGGCC-3' (SEQ ID NO: 5) and 5'-CTGACGATCGCGTACACGCCTACTC-3' (SEQ ID NO: 6) and the plasmid pUHD10.3 as DNA template. The Tet binding site was cloned into PacI restriction site of pBSE4, just upstream the E2 promoter. The final goal was the reduction of background expression of E2 promoter exploiting the silencing effect of tetracycline-controlled transcriptional silencer as described by Rittner (Rittner K., et al (1997) J. Virol. 71:3307-3311). Ad5 E4 region present in PBSE4-ept was then eliminated by digestion with MfeI and ClaI restriction enzymes, the vector DNA was gel-purified and ligated to a Tk-Hygromycin B resistance expression

Please replace the first paragraph on page 31 of the specification (see lines 1-10 on page 31) with the amended paragraph set forth below. (Appendix A, which is enclosed herewith, shows how the first paragraph on page 31 was amended to produce the amended paragraph set forth below. In Appendix A, the portions being added are underlined; and the portions being deleted are enclosed in brackets.)

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cassette DNA obtained by PCR with the oligonucleotides

5'-AGTGCACAATTGATTTAAATAATCCGCGCGGTGG-3' (SEQ ID NO: 7) and

5'-TGCAATCGATCAACGCGGGCATCC-3' (SEQ ID NO: 8) using pCEP-4 plasmid DNA

93 as template, generating pBS $\Delta$ E4. The adenovirus ITRs in head-to-tail configuration were then amplified by PCR using the oligonucleotides 5'-TCGAATCGATACGCGAACCTACGC-3' (SEQ ID NO: 9) and 5'-TCGACGTGTCTCGACTTCGAAGCGCACACCAAAAACGTC-3' (SEQ ID NO: 10) and pFG140 (Microbix) plasmid DNA as template. The Ad ITRs were cloned into the NruI unique site of pBS $\Delta$ E4, generating pBS $\Delta$ E4J.

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Please replace the second paragraph on page 32 of the specification (see lines 7-37 on page 32) with the amended paragraph set forth below. (Appendix A, which is enclosed herewith, shows how the second paragraph on page 32 was amended to produce the amended paragraph set forth below. In Appendix A, the portions being added are underlined; and the portions being deleted are enclosed in brackets.)

Ad/EBV shuttle plasmids (pSA-1 and pSA-2) were further modified by deleting a DNA sequence corresponding to DNA binding protein (DBP) gene (nucleotides 22443-24032 of Ad5 sequence). The deletion was obtained by homologous recombination in *E. coli*, following the method described by A.F. Stuart and coworkers (Zhang et al. Nat. Genet. 1998;20:123-128). A DNA fragment containing the Tn5 kanamycin resistance gene (neo) flanked by DNA sequences was obtained by PCR with oligonucleotides 5'-GCGGTTAGGCTGTCCTTCTTCTCGACTGACTCCATGATCTTTTTCTGCCTATAGGAGAAGGAATCCCGGC GGATTTGTCCTACTCAGGAGAGCG-3' (SEQ ID NO: 11) and 5'-AAATGCTTTTATTTGTACACTCTCGGGTGATTATTTACCCCCACCCTTGCCGTCTGCGCCGTTCTGCAAACCCTATGCTACTCCGTCG-3' (SEQ ID NO: 12) consisting of about 60-bp of homology to DBP gene and, at 3' ends PCR primers to amplify neo gene using pGKfrt as template. Linear DNA containing neo gene was used in recombination experiments to delete the DBP gene from Ad/EBV shuttle plasmids. The same method was applied to construct Ad/EBV shuttle plasmids that do not express Ad polymerase gene and preterminal protein. The sequence of the oligonucleotides used to delete the polymerase gene was 5'-ACGGCCTGGTAGGCGCAGCATCCCTTTTCTACGGGTAGCGCGTATGCCTGCGCGGCCTTCCGGTCTGCAAACCCTATGCTACTCCGTCG-3' (SEQ ID NO: 13) and 5'-AGACCTATACTTGGATGGGGGCCTTTGGGAAGCAGCTCGTGCCCTTCATGCTGTGCATGTCCCGGCGGATTTGTCCTACTCAGGAGAGCG-3' (SEQ ID NO: 14). Two pairs of oligonucleotides were used to delete two regions within the the main exon of pTP: 5'-CCGCCTCCCGGTGCGCCGTCGTCGCCGCGGTGTCCCCCTCCCCACCGTC CCGGCGGATTTGTCCTACTCAGGAGAGCG-3' (SEQ ID NO: 15) and 5'-GATCTCCGCGTCCGGCTCGCTCCACGGTGGCGGCGAGGTCGTTGGAAATGCGTCTGC

Please replace the first paragraph on page 33 of the specification (see lines 1-9 on page 33) with the amended paragraph set forth below. (Appendix A, which is enclosed herewith, shows how the first paragraph on page 33 was amended to produce the amended paragraph set forth below. In Appendix A, the portions being added are underlined; and the portions being deleted are enclosed in brackets.)

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AAACCCTATGCTACTCCGTCG-3' (SEQ ID NO: 16),

5'-TCGACAGAAGCACCATGTCCTTGGGTCCGGCCTGCTGAATGCGCAGGCGGTCT

GCAAACCCTATGCTACTCCGTCG-3' (SEQ ID NO: 17), and

5'-TCGCCCCCGGAGCCCCGGCCACCCTACGCTGGCCCCCTCTACCGCCAGCCGCTC  
CCGGCGGATTTGTCCTACTCAGGAGAGCG-3' (SEQ ID NO: 18).

as  
The same method can be applied to other region of Adenovirus genomic DNA relevant to obtain a reduction of cytotoxic effects produced by viral gene expression in the infected cell.

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